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Visual Instruction News

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Motion Pictures as Stimulation for Written Language and History

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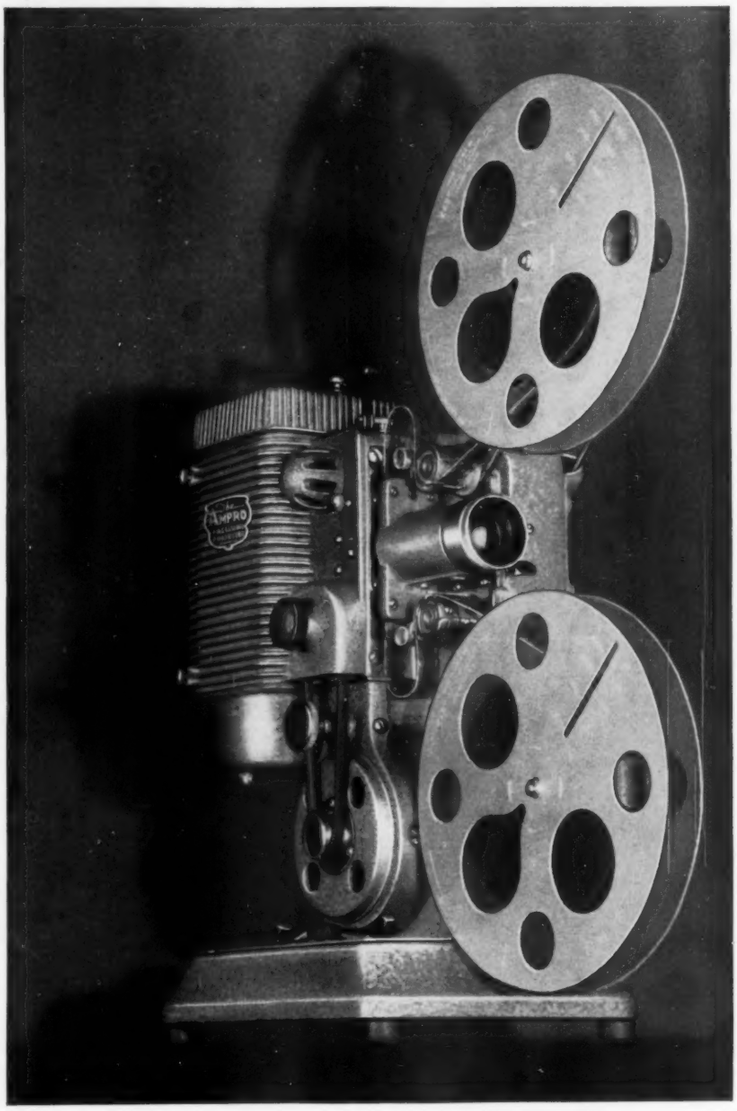

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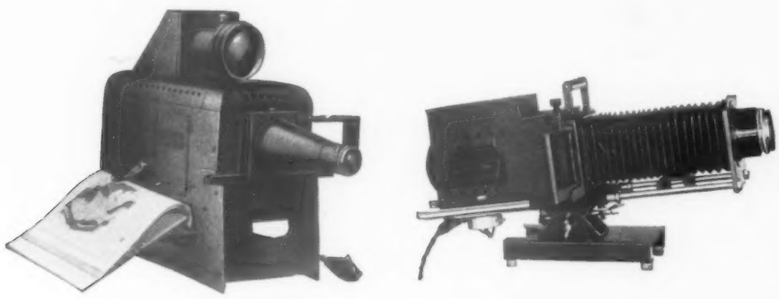

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FEBRUARY, 1934

VOLUME XIII NUMBER 2

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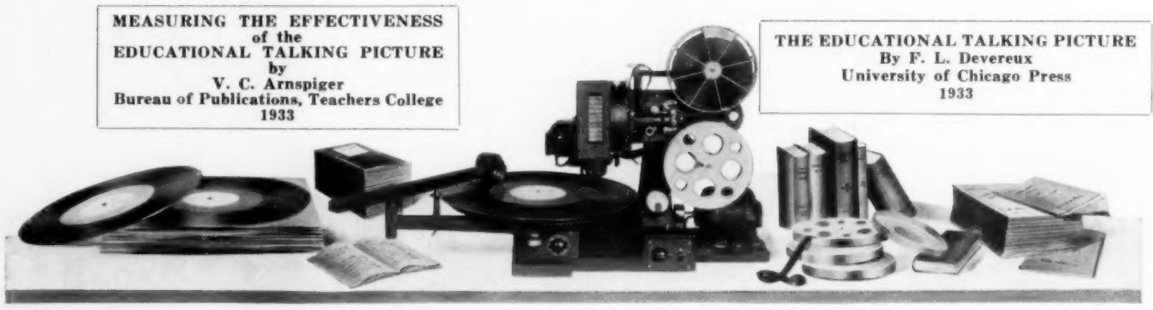

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EDITORIAL

The Museum and the Stereograph

AS WE remarked at some length in the issues of November and December last, a museum is a treasure-house of incalculable visual values, which are valuable only as they are seen. The method of the average museum for getting its contents seen is to sit still on its costly site and wait for the world to come in and gaze. The exceptional museum makes praiseworthy efforts to carry itself to the world by selection and preparation of displays and by the construction and transportation of the "exhibit case". The original cost of such an exhibit is high; maintenance and transport still higher; depreciation of case and contents swells the figure still more. And when this heavy expense has been successfully shouldered, two pitiful facts remain: (1) The efficiency of the service in proportion to cost—measured by the number of eyes that see it and the degree of attention behind those eyes—is pathetically low; (2) Only a fraction of a percent of the museum's contents can be risked in such a service.

We would urge upon museums, great and small, a careful consideration of Oliver Wendell Holmes' great invention, the humble stereograph. The worthy poet-professor builded better than he knew and, unfortunately, better than museums seem to know. The stereograph, in its modern perfection, looks very much like a cure for the museum's greatest weakness, inaccessibility.

Procedure would be simple and results fast. Initial equipment would consist merely of a stereoscopic camera of highest grade but in the modern small size—amply strong lights, with cable—quarters for developing and printing—and expert operative skill. Then, make perfect negatives of objects and displays, large and small, covering the museum's collections rapidly or slowly, partially or completely, as desired. When backgrounds are present the stereograph will carry every detail. Show case objects can be done individually, against black velvet, perfectly lighted and shadowed, and with the distraction of adjacent objects eliminated. Actual size is readily shown by inclusion in the field of a familiar object whose dimensions are universally known—a human figure beside a large display (but face away from the camera, for the human face distracts from the inanimate objects offered), a dime beside a tiny object—but never a ruler or scale, for that introduces an interpretative step from the concrete to the abstract. The viewer's mood for the concrete should not be interrupted.

Mass production from these negative means a cost of but a few cents per mounted stereograph. Each stereograph means unlimited viewings by thousands of eyes for years. When colors are important, as they often are, the prints should be colored, and at additional cost sufficient to secure artistry. A lump of coal, snowy coral, white lace, marble statues, and a host of other things may be safely left to the camera alone. Color photography may prove the desirable method.

Modern small-sized stereoscopes, hardly as large as a package of fifty library cards, can be had in quantities at exceedingly low cost, to touch the flat stereographs with the magic of the third dimension. Place a few scopes in each school permanently, and supply stereographs by mail on subjects desired, as often as desired, as long as the museum and school shall function. This can be done on purchase, rental, loan or gift basis as policies and conditions dictate. And there are American homes as well as American schools.

We would guard against the idea that we are suggesting an inferior substitute for a museum exhibit. The stereograph would mean not only increased efficiency of service at decreased cost. It comes perilously close to being better visual material than the exhibit itself in several respects. The pupil with a scope at his school desk, for example, is using the museum's material under perfect conditions; he is in a learning situation, without distraction, intent upon the subject under study, seeing it even more perfectly than his eyes could see it at the museum, with no brass railing to hold him at a distance, no glass case that he must not lean upon, no neighbors to jostle or crowd, no group urge to move on to the "next thing to see". He can think, reflect, gather in every detail in undisturbed absorption, and fit it satisfyingly and accurately into his previous stock of learning.

In the school field alone, how meaningful would the museum become! Instead of an occasional visual consciousness of an exhibit case glimpsed in a dark corridor during change of classes, in addition to a possible semi-annual visit to the museum itself (and the stereographs would provoke more visits), young America could hold daily, in studious comfort, the finest treasures of our splendid museums within a few inches of his eyes, and for his eyes alone.

ANY new idea expects attacks from its enemies and keeps carefully on the defensive against them. It is not always so ready for body-blows from its friends. The visual idea in education has suffered gravely, its universal acceptance has been seriously retarded, by promotional efforts and arguments born of the best intentions and naivest ignorance.

We are sure our readers will enjoy the detailed account in this issue of one of those disastrous "demonstrations" which have occurred by thousands in this sorely tried visual field of ours. Not one of the "demonstrators" but meant well—meant to impress, convince and prove beyond peradventure the all-importance of visual procedures. He is seldom aware of failure, even after he has achieved it. His flounderings make the judicious ache, but they will probably continue until the audience shall have learned better from other sources and leaves him to "demonstrate" alone.

The writer of this welcome little article, an expert in affairs visual, deserves the anonymity he requests. He gives valuable publicity to a regrettable practice that needs diminishing. More articles in a like vain might be good for the field.

NELSON L. GREENE.

Motion Pictures as Stimulation for Written Language and History

JOHN S. HERRON

THE TEACHING of English and the content subjects to children from foreign-language homes is beset with paramount difficulties, as thousands of teachers know from experience. Joyful and interesting as the teaching may be in many respects, the experience, nevertheless, signifies so often herculean effort on the one hand, and discouraging results on the other. In this situation, the child is entitled to the same degree of sympathetic understanding as is the teacher, for the former is compelled to share his time and attention between the learning of two languages, however poorly done.

It is generally recognized today that the greatest obstacle the child from a foreign-language home has to hurdle is that of *vocabulary*; that most academic failures with this type of child can be traced to his lack of the tools of expression. We do know, with certainty, that what was yesterday considered the low intelligence of great numbers of children from foreign-language homes was actually nothing more than evidence of their confusion in the face of words they never had heard or read before.

Since paucity of English vocabulary is the root of the difficulty referred to, the cure, in large measure, lies in providing for the pupils *real experiences* through purposeful activity; and where real experiences cannot be had at first hand, the employment of visual aids of all kinds constitutes a practical substitute. Reading, socialized discussions, word study, stories, home and street influences, etc., play their parts in developing vocabulary, but experience, either real or substitute, affords a starting point altogether too little appreciated. Recognizing the great value of appeal to the eye, Lafayette Street School, Newark, New Jersey, has emphasized visual instruction, through many mediums, from kindergarten through eighth grade — not alone as stimulation for the development of power in language expression, but also for its psychological appeal in all subjects and activities.

The purpose of this article is to explain a plan, employed successfully for the past five years, whereby auditorium showings of motion pictures have aided (1) in vitally improving written language work, and (2) at the same time, in making American history something of a real experience, rather than a confusion of hazy ideas. This article does not take into consideration the employment of visual aids used by the teachers in the classrooms, but restricts itself to the tie-up between the auditorium showings of historical films and the training in language expression and appreciation of history, as a follow-up in the classroom. By way of explanation, it may be stated that Lafayette Street School is of the platoon type, caring for 1800 pupils who come largely from homes in which Italian, Spanish, and Portuguese are spoken.

1. **Visual Aids Employed**—The films, selected from the Board of Education library and shown regularly at intervals of three weeks to grammar classes only, have consisted of the following: (A) "The Chronicles of America Photo Plays," presenting the following episodes: "Columbus" (4 reels), "Jamestown" (4 reels), "The Pilgrims" (4 reels), "Peter Stuyvesant" (3 reels), "Gateway to the West" (3 reels), "Wolfe and Montcalm" (3 reels), "Eve of the Revolution" (3 reels), "The Declaration of Independence" (3 reels), "Yorktown" (3 reels), "Vincennes" (3 reels), "Alexander Hamilton" (3 reels), and "Dixie" (3 reels); (B) "Son of Democracy—Abraham Lincoln"—10 episodes, 20 reels; (C) "Citizenship Series—Nine Lessons" (9 reels).

Courtesy of Yale University Press

Columbus Takes Possession, in the Name of Spain, of the New Found Lands

2. **Classroom Preparation**—One week before a scheduled showing, the digest of the episode to be presented is received from the Department of Visual Instruction. This digest circulates in all the homerooms where it is read, studied, and discussed by pupils and teacher together. The story of the digest is compared with the children's text-books. Dictionaries are used and new words are brought forth for possible addition to the pupils' vocabulary list.

The picture previously shown is reviewed and joined to the one about to be presented. Maps are studied and geography does its all-important part in establishing a true knowledge of the setting. This careful preparation develops interest from the start and brings

into play the psychological factors of curiosity and anticipation.

3. The Auditorium Showing—On "movie" days, the auditorium program is so scheduled as to permit each home-room academic teacher to be present at the same time with both of her classes. The period is fifty-five minutes long, forty minutes being used for the actual running of the reels. Because of the careful preparation, the pupils are ready to enjoy the picture intelligently. Commenting recently on this phase of the plan, the vice-principal remarked: "The pupils observe the photoplay with keen interest and real pleasure. They are looking for something, and not at something; they are seeking something the text-books speak about, something the teacher has talked about. The children are now seeing things for themselves, things that happened long ago. Important happenings are fixed in their minds, for they are eye witnesses to all these events."

The panorama of American history passes before the eyes of the children and becomes for them a series of real events. In the showing of the "Chronicles of America," for instance, they are present when Columbus plants the standard of Spain and the emblem of Christianity on the shore of San Salvador. They see Lord Delaware arrive in Virginia just in time to prevent the disheartened Jamestown settlers from returning to England. They perceive the physical suffering of the settlers of Plymouth in 1620, and witness the defiant stand of Peter Stuyvesant when the English demand the surrender of New Netherlands. Wolfe and Montcalm enact the drama of Quebec before their eyes, and they look on when Washington receives the surrender of Cornwallis at Yorktown. And so on down through the succeeding decades of our history—they journey with Clark, fight with Boone, and are victorious with Grant.

Needless to say, the glorious events of American history have taken on an added glamor and significance, all because the motion picture has removed the bandage from their eyes and permitted them to see, experience, and comprehend more fully than if they resorted to books and talks alone.

4. The Classroom Follow-up—The auditorium showing is followed immediately in the classroom by a socialized discussion of the episode. Customs, manners, furniture, and dress are compared with those of the present day, the significance of various events is discussed, ambiguities are cleared up, and the pupils are now ready for formal self-expression.

The subsequent work of the class covers the succeeding week or two, if necessary. The aim now is to use the film showing for the purpose of motivating the written language work. Oral composition is now stressed as preparation for the written paper. Following a class-made outline, the pupils are expected to give an oral synopsis of the picture, or some phase of it, in three or four paragraphs. New words and phrases, which the pupils are encouraged to use, are written on the blackboard. The children take their turns at telling their version of the story, with corrections politely made at the close of each.

The next step is the actual writing of the composition. In some classes this may take the form of working upon one paragraph at a time; in others, the class may proceed on the whole composition. Correct spelling of all difficult words is placed on the board for all pupils to see. Pupils are encouraged to appropriate words or phrases from their texts. Special stress is laid upon variety of expression, the introduction of words new to the pupils, the completeness of the sentence, and the unity of the paragraph. The first draft is made in lead pencil, the pupils being encouraged to exchange and correct one another's papers. All the while, the teacher works with individual pupils, pointing out where the draft may be improved and corrected. At a succeeding period, the papers are re-written carefully in ink, special attention being then given to form, neatness and penmanship.

From this point on, the teacher will follow through with further corrections, and most of the compositions will be again re-written carefully in ink. The special teacher of penmanship will make it a point to observe the final draft, as to quality of penmanship and general appearance. The entire set is then sent to the vice-principal.

5. Supervisory Evaluation—The vice principal carefully examines and grades all class sets, looking for points of excellence and outstanding defects. Common errors are noted and incorporated into a paragraph upon which all classes are given opportunity of making corrections. The one outstanding composition

Courtesy of Yale University Press

Surrrender of Cornwallis' Army to Gen. Washington at Yorktown

of each set becomes part of a traveling exhibit which is sent into each room to be read for the encouragement and stimulation of the pupils. Each set, with

comments, is returned by the vice-principal to the classroom, the individual compositions finding their way into the folder of each pupil, there to await the succeeding compositions to follow from future auditorium "movies."

Summary—After five years of experience in using motion pictures to improve the language and history work of the grammar grades, the writer would sum up the results as follows:

(1) Increased interest in history has been manifested. The subject has been vitalized and the dull pupil, in particular, has been aided in forming correct historical concepts.

(2) Children have evinced a greater desire than ever before for "movie" day to come. This interest in the history showings is apparent in all classes. It is a calamity for a pupil to miss the film showing.

(3) The written language work of the school has improved remarkably and it is maintained at a high degree of excellence.

(4) Pupils enjoy writing their reports and are able easily to note the progress they make from month to month.

(5) The teachers are enthusiastic about the plan because they know that it works.

While not presented as evidence of results, the fact remains that, for the past five years, the D. A. R. trophy for excellence in composition on historical subjects has been awarded annually to pupils of this school, in competition with other schools of the city. The plan has worked well in this school and it can be recommended as worthy of trial by other schools.

Note—By A. G. Balcom, Assistant Superintendent of Schools.

It should be mentioned in connection with this excellent article that the Vice-Principal referred to by Mr. Herron was Miss Julia Dean, recently retired. It was she who was largely instrumental in carrying forward this work and who personally examined all of the compositions. So interested was Miss Dean in this work that she now reads these compositions of the pupils at her home, thereby filling in the leisure hours of her retirement.

Confessions of a Visual Enthusiast

ANONYMOUS

WE ALL make mistakes—as indicated by the thriving trade in erasers which carries on year after year, and it is often through these very mistakes that our best learning experiences are derived.

Mistakes generally stand out in relief from a background of commonplace or even brilliant achievement, and are easily spotted. Examples of this are legion—in fact history is built upon the mistakes of governments and of individuals, and literature thrives on the mistakes of Pontius Pilates, Napoleons and Samuel Insulls. It may be that life would prove colorless and uninteresting if devoid of mistakes, and it is certain that many industries would be obliged to close their doors and many people would lose their jobs.

The results of some mistakes affect only the perpetrator, while in other cases many innocent victims are dragged down with him. Mistakes vary in cause, magnitude and effect. The causes are ignorance, muddleheadedness and carelessness. There is excuse for the first and second, but none whatever for the third. The results may vary in intensity all the way from slight inconvenience to utter disaster, and the scope may be confined to a small local area or may spread over a nation, continent, or the entire world.

As stated previously, mistakes usually come singly and are quite conspicuous. They may even come in pairs or possibly in triplets—but it is rare indeed and certainly worthy of special note when every act in a series of events is absolutely wet; when serious mistakes are so surrounded and equally matched in a forest of similar mistakes, that there is no basis of comparison, no outstanding feature.

It has been the good fortune of the writer to be present at the perpetration of such a glorious fantasy of error. The occasion was a regular meeting of a group of educators (the unsalted variety), and the purpose was to demonstrate to a group of teachers, how hand-made lantern slides should be used, and how to make photographic lantern slides. It was a quiet party—no one was killed, no one arrested. Not a stick of furniture was broken and the entire audience was allowed to leave without being searched.

The writer came away with mixed emotions—discouragement, pity, sympathy, mirth, incredulity—but mostly a feeling of profound satisfaction, in having learned a valuable lesson under most complete and favorable conditions. It was some time later, however, and after much cogitation, that he was able to come to any satisfactory conclusion as to how such a complete fiasco could possibly continue to its pitiful and dramatic conclusion, without any of the principals being even faintly aware that anything was amiss. Blissful ignorance is the only possible answer.

The teachers gathered at the meeting place—

they were all on time—they strolled about the halls reading the notices of other events that were scheduled to take place that evening in the same building (there was no notice of the Lantern Slide meeting). The meeting had been called for 9:00 P. M. At 9:20 the teachers became nervous—they found the manager of the building and asked if they had come to the right place. The manager looked puzzled, but stated that he had not been notified that there was to be such a meeting that night. He was a resourceful man and sent for the janitor to unlock the door of a room on the third floor, where these meetings were usually held. The teachers went in and made themselves at home. There were not enough chairs, so they borrowed some from another room.

The photographer who was to demonstrate the making of photographic slides, came in with two large cases of equipment—he opened these and disappeared into an adjoining dark-room, leaving the cases on the floor. The chairman of the meeting came in with his assistant and announced that Miss Blank would show some lantern slides intended for use in teaching elementary arithmetic and English.

While the announcement was being made, the assistant was engaged in setting up a magic lantern for the purpose of projecting the slides. There was no table in the room, but the photographer, who seemed an ingenious fellow, assembled a precarious stand by balancing across the backs of two chairs a peculiar piece of modernistic furniture which decorated (?) the room. The lantern was balanced on top of this and the lamp cord plugged into a base outlet conveniently located directly behind the lantern.

The photographer was now making ready for his part in the program, but was somewhat handicapped by the fact that the water had been shut off from the dark-room. He got some in a milk bottle which he found in the basement and continued his experiments.

A much used and very wavy aluminum screen was pulled down at the end of the room opposite the projector. The screen was so high that the lantern had to be tipped up at a dangerous angle to throw a picture on it.

The teacher with the arithmetic slides took her place beside the lantern and placed a slide in the holder. She snapped on the switch—but the light didn't go on. The assistant went to her assistance, and followed an uneasy period of several minutes, during which the writer (who is somewhat electrically inclined) debated whether it would be out of turn for him to get in on the repair work. He decided in the negative and joined the tinkering at the lantern. The following conversation ensued:

The Writer: "Perhaps the lamp is burned out."

The Assistant: "Perhaps it is."

The lamp was removed and was found to be decidedly burned out.

The Writer: "I guess you will have to put in your spare lamp."

The Assistant: "Er-ah-we-ah-have no spare lamp."

The Writer: "Oh."

The chairman was called back, and he said perhaps he could borrow a spare lamp somewhere in the building. This seemed very unlikely, but to the surprise of the considerable group assembled about the lantern, he reappeared in ten minutes with another lamp. As the assistant was putting the new lamp in place, the writer suggested that it might be well to look the lantern over a bit before continuing the show, and make certain adjustments. The assistant said this would not be necessary because he had been all over the lantern before he came. The words were not out of his mouth, when the whole bottom fell out of the lantern. By good fortune the writer was able to catch the lamp on the second bounce, else the following pages of this narrative could never have been written.

The lantern was soon re-assembled and again balanced on top of the pile of furniture. The teacher with the arithmetic slides took her place beside the lantern and snapped on the switch. Contrary to our expectant hopes the lamp did not light. This was a poser. The writer borrowed the photographer's dark lamp and plugged it into the base outlet in place of the projector cord. The outlet proved to be dead—no juice.

The photographer was a resourceful chap. He said we could plug into the outlet in the dark-room. This expedient called for a fifteen foot extension cord.

The Writer: "Just let me have your spare extension cord, and I'll have this hooked up in a jiffy."

The Assistant: "I-ah-we have no extension cord."

The Writer: "Oh."

This was a poser. The photographer to the rescue again. He thought he had a cord in his car, and he obligingly ran down to get it. He was back with it in not more than ten minutes. The cord had the wrong kind of connector on one end, but this was soon exchanged for the proper kind, which was borrowed off of some piece of apparatus in one of the cases on the floor.

Most of the teachers were sitting sideways in their chairs watching these preparations while some were strolling about the room or getting rather in the way near the lantern.

All was now in readiness—the teacher with the arithmetic slides took her place beside the lantern and snapped on the switch, the lamp lighted and

(*Continued on page* 52)

Making an Educational Movie

CHARLES A. GRAMET

(Concluded from January issue)

PICTURES are made in the laboratory rather than in the studio. There is much truth in this statement. In the commercial studios many of the special effects are made in the laboratory. In any case the processing of editing makes a picture out of a collection of shots.

Editing

Editing is work. Only a good picture at the end compensates for the effort. There are many methods that have been suggested or that are in use professionally or by amateurs. I shall describe mine for any suggestion that it may offer. I edit a positive print and cut my negative accordingly for duplicates. Instead of using a viewer at first, I project the positive print and view each scene on the screen. With the exception of one editing device, the others merely show a succession of still pictures. I want to see the action as it will take place on the screen. I cut the film as I view it, cutting off and out parts that I will omit. Some people use editing boards, containing many pegs upon which each scene is hung, with an attached label. I prepare many strips of paper the width of the film and about four or five inches long. As each scene is cut I roll it and wrap a strip around it. A drop of paste seals it and the roll is labeled. These rolls can be stored until another time when the editing may be resumed. They are then arranged in the order of the continuity, spliced and reeled. The film is then re-reeled and viewed for the first time.

The first projection is important. At this time I decide which of the scenes must be retaken; which eliminated; which of several representations of a scene is the more effective; what change in the arrangement of shots may be desirable. A pad and pencil are necessary at the first showing. The changes are made and I have a second viewing. The film is run through without interruption so that the effectiveness of the arrangement and continuity may be properly evaluated. Again notes are made. If necessary this process must be repeated. I find that after this procedure the shots are well fixed in mind so that the editing of the negative is facilitated. The film lesson is now ready for titles.

Titling

There are two aspects to the business of titling. The first is mechanical and readily solved. The second is psychological and pedagogical and requires considerable thought.

There are a number of titling boards and apparatuses available on the market. One can be rather easily designed and constructed. Having made a good picture we shall not be content with crude or mediocre titles. Typewritten cards are usually unsatisfactory because the letter outlines are not smooth when greatly enlarged. This can be improved by cleaning the type well before titling, using a new heavy-inked ribbon and perhaps going over each letter twice. Good hand lettering is far better. Commercially, the titles are generally set in type and printed on the card. Such titles are to be preferred. Many schools have small presses upon which good title cards may be printed. Commercially-made titles are not very expensive and we may well save the time and trouble involved in making our own. If one is resolved to do the entire job, a trial strip must be photographed to determine the required illumination, size of card best suited to the apparatus, the distance of the card from the camera, and the aperture of the lens. In the next paragraph a brief resume of the process is given.

Load the camera with about ten feet of positive film. This is used because it gives greater contrast. Set the camera and title card in fixed positions with respect to one another. Your viewer will not be of any use in viewing the card because of parralax (displacement of the image) at this short distance. The simplest method of centering the card is to use a plum line from the center of the lens to the center of the card. The position of the camera and card must be marked and fixed. The card should be evenly illuminated with a pair of photoflood lamps in reflectors. The greater the illumination on the card the smaller will be the lens stop that can be employed and the sharper the titles that result. A photometer will give the correct exposure for normal film. This will be multiplied by four or five since positive film is very slow. Careful note is made of the exposure times. Develop the strip by hand in a contrasty developer. This will be your test strip. The titles will of course be reversed. If you used a white card and black lettering the titles will be ready for splicing into your film, since the eyes are less strained by the black background. Otherwise a print is made from the film which is used as a negative. Many special effects are possible in titling. After reading the above you will probably decide to have your titles made.

The aspect of title-making for teaching pictures that should engage our thought and attention is the psychological and pedagogical. The language must be within the comprehension of the age group for which the film is intended. It may well be checked against standardized word lists. In teaching pictures, moreover, the titles should have the following characteristics: they should be relatively short; pointed; suggestive; challenging. In no lesson should pupils be passive participants. This is equally true in a film lesson. Their attention must be of the active, alert type; their thought must be constantly challenged. Let us strive to rid pupils of the idea so often heard expressed—"There is no lesson today. We're going to see a picture." Titles are the language of a good teacher transferred to the film, appealing to the eye rather than the ear. Occasionally a lecture is good

teaching. Usually the developmental, cooperative type of lesson is productive of the best results. I believe that too many of our pictures today merely tell through their titles; they do not teach, stimulate thought or engage the active attention and cooperation of the pupils in the learning process.

The number of titles should not be excessive or else the film lesson will be comparable with one in which the teacher talks throughout the period, to the exclusion of the pupils. The film must be a picture of things, processes and activity, not of words. If the continuity is carefully developed, fewer titles will be necessary. Twenty five per cent of the film given to titles should prove altogether adequate. Commercially, in entertaining pictures, about ½ a second per word is allowed and unless the words are technical this should be enough in teaching films.

Costs

This problem has been deferred because it is so difficult to answer. How much does it cost to make a film? Who shall bear the cost?

The cost of a film depends upon many factors. The length is the first. One hundred feet of film costs about $5.00. The standard teaching films are about four hundred feet long. We should count on taking twice as much film as we use. Add about ten dollars for titles, a few dollars for lamps and incidentals. And in the end you will probably have spent more than you estimated. The cost of the equipment is not considered at this time.

It may be objected that a commercial film can be bought very much cheaper, without any investment in apparatus or labor. The making of these pictures is not described as a money saving device. I am primarily interested in improving teaching pictures. In fact, however, we may save money at the same time. A good picture will yield many prints, so that many schools may share the benefits. The cost of production can thus be distributed.

My experience and knowledge indicate that it may not be advisable for a school to purchase equipment unless some teacher has shown special interest and aptitude and there is some assurance that that teacher will remain in the school long enough to make use of it and to interest other teachers in it. In larger systems the equipment may be owned and housed centrally and loaned to schools for productions. General organizations and professional societies should consider the advisability of financing such enterprises as contributing to better teaching.

I am dealing, however, with realities and therefore this article is addressed especially to those teachers that own cameras and would be interested in such a project as is herein described. The estimated cost should be from $50.00 to $100.00 dollars, a not inconsiderable sum in these days of rising costs of living, of declining dollars and threatened salaries. Those of us who play with pictures as a hobby will probably make sacrifices to make them. One picture a year may not prove financially prohibitive. If we shall contribute to the improvement of teaching we shall reap a double reward. And perhaps we shall be able to interest commercial producers and have some of our bread return to us on the waters. For the 16 mm. film of today yields pictures that project perfectly in the classroom and very acceptably in large auditoriums.

Talking Pictures

A number of teachers who may have been interested in making such pictures may have abstained from doing so because of the fear that the sound pictures would make their efforts obsolete very soon. I have given this problem considerable thought and experiment. I have tried and used both the silent and talking pictures. A study has been made and will be, I am informed, soon published on the relative effectiveness of the silent and spoken title. It should prove very interesting. The best talking pictures that I have seen in the educational field, were good because of the photography and not because of the sound.

It appears to me that where sound is essential in conveying the idea or forming the concept, it is an improvement in methodology to use it. Where the sound merely replaces the printed title or the incidental speech of the teacher I see little advantage and some possible disadvantage. It is well for the amateur to eschew for the present the first type of lesson. Perhaps later we shall find that such pictures too are within our powers.

In the picture in which the sound consists of a lecturer telling what is portrayed, we have an exemplification of the lecture method and such pictures will have the weaknesses of this type of lesson. It displaces the teacher for the possible advantage of having an authority speak. I am inclined to feel that the loss of a good teacher's personality is not compensated by the questionable advantage. I am open to conviction and if it can be demonstrated that the same picture used with similar pupils produces better results with talk attached than it would in the silent version with the help of a good teacher, I'll be convinced. Then I should arrange with one of the numerous companies that have been organized to do such work to "dub" a sound track for me, that is, to attach to my film the necessary sound. Sound should not deter us from proceeding with the making of good teaching films.

Summary

The principles, practices and suggestions given in this paper are the result of my practical experience in making pictures in science, using them in the class room, and studying the available theory and practice in movie making. To me these pictures are a happy union of my vocational and avocational interests. I trust that I may stimulate others to similar activity, and thus contribute to the improvement of teaching and to their own pleasure and happiness in riding their hobby.

THE CHURCH FIELD

CONDUCTED BY R. F. H. JOHNSON

Using the Direct Route to the Feelings---
A Character Education Project

H. PAUL JANES

BECAUSE the roots of character are in the feelings, a great many thinking people have despaired of intricate methods of character training. It is quite obvious to the experienced person that an individual makes his environment as much as his environment makes him; that an individual alters the outcome of his heredity as much as heredity alters his course of living; that a bad example may be a good example, and a good example may be a bad one as far as effecting a child's behavior is concerned, and that in many circumstances, if not in all, it is impossible to lead a group of boys and girls to sincere conclusions that it pays to do right.

We behave because we have feelings of pleasure and satisfaction which are associated with certain ideals which symbolize behavior patterns, and behavior patterns may readily be altered if feelings of pleasure and satisfaction can be associated with an improved pattern, which means that they must become associated with the symbol or ideal which stands for that behavior pattern.

Just as it is possible to teach a dog a trick by the stimulation through synthetic stimuli of feelings which are satisfying, coincident with the execution of a certain trick, so it is possible by the use of sound and sight stimuli to stimulate feelings of pleasure and satisfaction in children in association with symbols of approved behavior patterns. For technical reasons these behavior patterns are symbolised in many ways, but the symbol is articulated in some verbal statement such as, "honesty is the best policy."

Those who use sound and light stimuli are not intending to teach anything, i. e., to cause a child to memorize anything. If the child likes the experience and wants another we know that if the content of the stimuli was correct, then a change in emotional attitude of the child toward an unappreciated but socially approved type of behavior is certain to have occurred.

It is by the use of this technic that all of the miracles in training animals have been accomplished. While the child is a much more complicated organism, and we expect him to develop more complicated behavior patterns, yet, a little study of the source of character will indicate that sometimes by the design, but most often by accident, character associations are built up in exactly the same way as a dog learns tricks.

Upon first considering this technique it seems too simple to be effective, and too good to be true. But, because there have been a large number of requests for descriptions of the types of programs being used in this work, the following three are presented. It will be quite obvious to anyone that these programs are designed for no other purpose than to stimulate "thrills," which are in their most fundamental sense "stuff" of which emotional associations are made.

Program I—Patriotism

On the screen are bright colors in pleasing design. The music is of the light program type, romantic in theme. As the students are seated the colors fade and in their place, projected from a stereopticon machine, appears a picture of the Capitol at Washington at night. At the same time the romantic music fades, and in its place is heard a brilliant military number.

At tne climax of the military number the picture of the Capitol at Washington fades, and in its place the picture of the American flag appears. As the picture of the American flag disappears the Lincoln Monument at Washington is seen.

At this time the music changes from the military to deep, sombre, Chopin's "Funeral March." During the playing of this number the words of Lincoln's Gettysburg address are projected over the statue of Lincoln. When the words, "That a government of the people, by the people and for the people shall not perish from the earth," appear the music changes quickly to military again, and the picture of the Capitol of Washington appears in the place of the Lincoln Monument, then the flag, and the bright colors, as the military is replaced by the romantic "love theme" music.

Program II—Friendship

A picture of a beautiful outdoor scene is on the screen, romantic "love theme" music in the air. As the students are settled in their seats the picture on the screen fades, and in its place appears a picture of a boy and girl—a human interest picture.

(*Concluded on page* 44)

NEWS AND NOTES

CONDUCTED BY JOSEPHINE HOFFMAN

Visual Instruction Emphasized During Leadership Week

The Thirteenth Annual Leadership Week, held at Brigham Young University during the week of January 29-February 2, 1934, placed special emphasis upon the application of visual aids to instructional and recreational programs of the various community organizations represented. Visual instruction materials and equipment were used with several of the class groups and a course in visual instruction was offered daily by Professor Ellsworth C. Dent.

In addition to these uses of visual aids during the regular class sessions, three programs of talking pictures were presented in College Hall and approximately twenty reels of silent educational films were used for open demonstrations. The talking picture programs included two showings of the opera, *Pagliacci;* one showing of the industrial film, *The Gift of Montezuma;* and a showing of a special talking film demonstration reel prepared by Dr. Wallace W. Atwood, President of Clark University.

The silent film demonstrations included the best educational and industrial subjects. Several of the Eastman Teaching Films were used and the Chronicle of America Photoplay, *Yorktown,* formed the basis of discussion for one of the regularly scheduled class sections.

Special demonstration equipment for Leadership Week was provided by the Ampro Corporation; the Bell & Howell Company; Herman A. DeVry, Inc.; Photographic History Service; E. Leitz, Inc.; National Theatre Supply Company, Salt Lake City; Spencer Lens Company; Keystone View Company; and by several other educational and industrial organizations.

All types of visual aids were discussed and demonstrated, including the exhibit, the school museum, the school journey, the mounted picture, the stereograph and stereoscope, glass slides, film slides, and motion pictures of all kinds.

The registered attendance at Leadership Week was approximately 1,800, not including the students and residents of Provo who were not registered but who were privileged to attend sessions in which they were interested. Leadership Week is one of the outstanding educational activities of the Mormon church, intended primarily for the instruction, inspiration and entertainment of the leaders in church and community activities within the range of influence of the Church. Delegates were registered from all states from Canada to Mexico and from the Rocky Mountains to the Pacific Ocean.

Vocational Guidance Film Material

The compilation of "Free Motion Picture Films for Classes Studying Occupations," originally published by the New York State Department of Education, has been recently revised by Mr. Herbert C. Kerman, Vocational Guidance Instructor at North Junior High School, Niagara Falls, New York, and sells for 10 cents a copy. A particularly valuable feature of this eight-page pamphlet is the comment accompanying each film title, which rates the film as excellent, good, fair or poor.

College Coaches Discuss Football Movies

The use of motion pictures in connection with football was discussed for almost a full afternoon session at a recent meeting of college and university football coaches in Chicago, reports F. G. Roberts of the Bell & Howell Company, Educational Department.

Head Coach Bennie Bierman of the University of Minnesota reported that at Minnesota they have taken 16 mm. movies of all games for years. Approximately 1000 feet of film are taken at each game, and then on the Tuesday following the game the pictures are shown to the players to bring out faulty playing technique or to call attention to good work. These films are also sent out on request to numerous high schools throughout the state for study by coaches and players in those institutions. Eventually the films are preserved at the University as historical records.

One of the greatest benefits from the use of movies, Mr. Bierman feels, is the education of coaches themselves. Every time he sees one of the Minnesota football movies, he stated, he notes improvements that can be made in certain plays. Also he likes to view films of games other than those played in by Minnesota, and thus obtain information as to the style of play of other schools.

Coach Hanley of Northwestern University gave a brief outline of how that school takes pictures in 16 mm. and gave some figures as to costs. He stated that it costs approximately $125.00 to have each play of every football game filmed on 16 mm. film. This includes the cost of cameramen, films, and all other items. The films are used in general practically the same as at Minnesota, he stated.

Followed a general discussion in which Head Coach Hugo Bezdek of Penn State spoke of the advantages of being able to stop a 16 mm. film, as it is being projected, for careful study of an individual portion of the picture.

Nation-Wide Teachers Agency

Continental Teachers Agency, with headquarters in Denver, is now numbered among our advertisers. Their service consists of securing positions for teachers, college students and college graduates of all kinds. Their operations cover the entire United States. They not only help their members secure permanent positions, but they also help them secure summer work Their terms are very reasonable, and they guarantee to secure a good position for their members, or to refund their enrollment fee in full. This issue contains the first of a series of their advertisements.

Health Chart for Schools

A wall chart and booklet, *Health Through the Ages,* have been prepared by the School Health Bureau, Welfare Division, Metropolitan Life Insurance Company, for use in junior and senior high schools. The booklet is intended to give boys and girls of high school age a sense of the agelessness of man's search for health. It begins with the medicine men and the magic of the Stone Age and traces, through various historical periods, the story of how man has learned to protect not only his own body but that of his neighbor. The conclusion of the story deals with certain aspects of the medical science of modern times.

The chart, *Light and Shade,* is a pictorial supplement to the booklet. Its object is to show graphically and in brief compass what a use of the scientific method has been able to accomplish in decreasing superstition and guesswork about the causes and treatment of sickness and increasing a knowledge of the natural laws by which the human body is governed. This chart makes no attempt to show the relative values of the contributions made to medical science in the various periods of history pictured. Its chief aim is to give boys and girls an appreciation of that spirit which entered medicine nearly 2500 years ago in the person of Hippocrates—the spirit of Science with its handmaids, experiment and observation.

The basis for the free distribution of this chart is one copy to a classroom. The booklet is furnished free on the basis of ten copies to every one hundred pupils.

Films for Parent Education Programs

As a part of the Emergency Education program, there is a desire to use motion pictures with parent groups. Therefore the United States Office of Education is collaborating with the National Council of Parent Education in compiling an annotated list of films which will be most helpful in educating parents about child care, health, hygiene; home adjustment; parent-child relations; parent adjustments; and community-parent-child relations. The compiled list of films will be made generally available to directors of motion picture service, special assistants in State offices, and leaders of parent groups in local communities.

The Church Field

(*Concluded from page* 42)

It tells the story of close friendship. The second picture shows two boys shooting marbles. Friendly, but interested in winning. The third picture shows two girls walking along the street together. Two or three more of this sort of pictures may be used with appropriate music, showing friendly relations. Near the end of this series of pictures the music volume is reduced and the reader speaks the following line: "He who has a thousand friends has not a friend to spare, but he who hath an enemy shall meet him everywhere."

Then on the screen is projected a familiar nursery scene. There are tin soldiers and other toys mentioned in the poem "Little Boy Blue." While this picture is on the screen the music and words of the song, "Little Boy Blue" are heard. At the conclusion of the singing of this song the music fades into a "love theme" number again.

The series of friendship pictures are then projected on the screen in a faster sequence. A reader recites very slowly, "He who has a thousand friends has not a friend to spare." At the conclusion of the series of pictures the outdoor scene again appears on the screen and the experience is ended.

Program III—Reverence

As the children enter the room the picture of Pettie's "The Vigil" is projected, and the music of the "Coronation March" is heard. In this stately and awesome atmosphere the following is projected: corridors of rock where loathsome creatures cower. The music fades to a very soft tone, and a reader recites the following lines: "Oh, somewhere, somewhere, God unknown exist and be! I am dying, I am all alone, I must have thee." At the conclusion of this reading the Faustian picture fades, and in its place appears the picture of a beautiful tree. The tragic music also fades and the group hears the music of Joyce Kilmer's "Trees." A singer sings the words. Between the singing of the first and second verses the picture of the tree fades from the screen, and in its place appears Pettie's "The Vigil." The picture of the tree used with the second verse is always an oak or an elm—these are ones in which a robin would probably nest.

As the music of "Trees" fades, a stately number such as, "The War March of the Priests" is heard. The picture of "The Vigil" is again projected on the screen.

DEPARTMENT OF VISUAL INSTRUCTION NOTES

CONDUCTED BY ELLSWORTH C. DENT, SECRETARY

Program of Department of Visual Instruction National Education Association

Carter Hotel, Cleveland, February 26-27, 1934

Some changes were made in the program announced in our January issue. The following revised program embodies these changes.

Monday, February 26

1:00 P. M.—Luncheon Meeting (Ball Room)

"16 mm. Sound Films for Schools"—Dr. V. C. Arnspiger, Director of Research, Erpi Picture Consultants.

2:15 P. M.—Afternoon Session

Motion Pictures and Youth

"The Educational Influence of Motion Pictures upon Children and Youth"—Dr. W. W. Charters, Director of Research, Ohio State University.

"A Comprehensive Program for the Teaching of Motion Picture Appreciation"—Dr. Edgar Dale, Bureau of Educational Research, Ohio State University.

"Extra-School Educational Influences"—Dr. Vierling Kersey, State Superintendent of Education, Sacramento, California.

"Popularizing Critical Appreciation of Photoplays Among Adolescents"—Dr. William R. Lewin, Chairman, Committee on Photoplay Appreciation, Nation Council of the Teachers of English.

(Brief Business Meeeting)

Tuesday, February 27

9:15 A. M.—Morning Session—Visit to Robert Fulton School as a Visual and Radio Center. Reception of a Regular Geography Broadcast from WTAM at 9:30 (Detailed program of other activities to be demonstrated will be available at the Robert Fulton School.)

1:00 P. M.—Luncheon Meeting (Ball Room)

"Russia's work with Educational Films" (With a showing of educational films from Moscow)—Mrs. Claire Zyve, Principal of Fox Meadow School, Scarsdale, New York.

2:15 P. M.—Afternoon Session

Visual Instruction and the New Education

"An Overview of Visual Instruction in the United States"—Wm. Dow Boutwell, Editor-in-Chief, Office of Education, Washington, D. C.

"A Preview of the Rome Meeting"—Dr. C. F. Hoban, Director of Visual Education and the State Museum, Department of Public Instruction, Harrisburg, Pennsylvania.

"Cleveland's Program and the New Education"—Dr. William M. Gregory, Director of the Cleveland Educational Museum.

Inspection of the Cleveland Educational Museum.

Massachusetts Visual Education Program

The Massachusetts Branch of the Department of Visual Instruction of the N. E. A. held its Fourth Annual Program Saturday, January 27, at Boston University School of Education.

Morning Session

Subject: *How To Organize Your School System For The Extended Use of Teaching Aids.* An illustrated discussion giving the results of experiences with a department of teaching aids. Why a centralized department is absolutely necessary. The services a department teacher should render. How to obtain the necessary equipment.

A co-operative plan was announced which makes available at very little cost the best educational films to every school system interested in this project. Films are now within the reach of every school.

Speaker: Abraham Krasker, Director of the Department of Teaching Aids, Quincy, Mass. Instructor in Visual Education, Boston University School of Education.

Subject: *How Some School Systems Are Extending The Use of Teaching Aids.* Many varied plans in actual operation were presented.

Speakers: 1. Miss Edna Legro, Principal of Aborn School, Lynn, Mass.

2. Mr. John V. Jewett, Director of Guidance, Brookline, Mass.

3. Mr. Russell V. Burkhard, Principal, Frank A. Day Junior High School, Newton, Mass.

4. Miss Ruth E. Crawford, Director, Cambridge Museum for Children.

5. Mr. Chester F. Prothero, Instructor, Beaver Country Day School, Chestnut Hill, Mass.

6. Mr. Joseph A. Hennessey, Instructor, Boston Teachers' College. In charge of Visual Education, Boston Public Schools.

7. Mr. Henry E. Childs, Director of Visual Education, Providence R. I., Public Schools.

Afternoon Session

1. *How To Make Your Own Non-Photographic Slides.* A discussion of home-made slides which may be made by pupils and teachers with cellophane, plain glass, or etched glass.
   Mr. Abraham Krasker.

2. *How To Make Your Own Photographic Glass Slides.*
   Mr. Richard W. St. Clair, Instructor, Massachusetts College of Pharmacy, Boston, Mass.

3. *How To Make Your Own Film Slides.*
   Mr. Burdette H. Buckingham, Instructor, Quincy High School, Quincy, Mass.

AMONG THE MAGAZINES AND BOOKS

CONDUCTED BY MARION F. LANPHIER

Educational Method (January) Mr. Howard A. Gray reviews the progress made in "Audio-Visual Instructional Materials" during the past three years. Until recently the development of such devices has been seriously retarded as schools were reluctant to purchase sound equipment with so few educational sound pictures available, and when such an innovation had yet to prove its worth; producers hesitated to risk undertaking sound production in spite of limited distribution; and projector manufacturers were likewise handicapped.

In spite of these difficulties educational sound pictures have practically doubled each year since 1930, as shown by the writer in a classified tabulation of such films compiled mainly from 1000 *and One, the Blue Book of Non-Theatrical Films.* This progress, he states, has been motivated by co-operative effort between educators, manufacturers, and producers in conducting experimentation and research necessary for the formulation of an effective program.

Journal of the Society of Motion Picture Engineers (December) In "Unoccupied Motion Picture Fields" Mr. William H. Short, Director of the Motion Picture Research Council, New York City, describes the work and purpose of the Council and summarizes some of the findings of their four years' research as regards (1) child receptivity, (2) memory, (3) emotional stress, (4) attitude, and (5) behavior patterns induced by viewing motion pictures. From such data Mr. Short concludes that there are many important unoccupied fields for the exploitation of the motion picture which demand attention, such as (1) teaching pictures, (2) juvenile entertainment, (3) entertainment for a large class of adults who do not apparently attend the motion picture theatres for various reasons, and (4) the creation of good-will for the future in respect of adult education, documentary or historical films, and scientific films.

Sierra Educational News (December) A concrete little write-up entitled "An Indian Activity: Visual Aids," by Frances Von Gardenheir of the Edison School, Long Beach, California, proves the effectiveness of the visual appeal in stimulating class interest and activity. After studying Indian life by means of films, flat pictures, and slides, the children in this 2B class were inspired to develop an original Indian dance and after that, a program for their mothers as a finish to the activity.

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Book Reviews

THE SOUND MOTION PICTURE IN SCIENCE TEACHING, by Philip Juston Rulon, Cambridge, Harvard University Press, 1933, pages xi+236; $2.50.

This investigation, undertaken jointly by the Graduate School of Education and the University Film Foundation at Harvard University, and financed by the Carnegie Foundation for the Advancement of Teaching, represents a significant contribution to our knowledge of the place of the motion picture in a program of general-science instruction.

The study reveals nothing about the "talkie" as such, as contrasted with the older silent picture. Those responsible for the experiment accepted this somewhat complicated instrument for what it was, without making any attempt to evaluate its component parts. It cannot be said, therefore, to have made out a case for the "talkie" as against the silent picture.

A series of specially constructed tests was given immediately following instruction and again some months later, and a comparison of the results was secured as between very carefully equated groups. A unique feature was the creation of a zero group, who had no instruction whatever, to fix the gains made by the control and experimental groups. The authors were singularly fortunate in being able to determine the precise form and structure of the instrument used. They also used an experimental textbook which they had prepared as a basal text.

The main conclusions reached were (1) that in terms of subject matter the pupil-achievement increase ascribable to the film "may be expected to exceed 20 per cent"; (2) in those facts and relationships "specifically dealt with in the films used", measured in terms of the aquisition and understanding of this material, "The film-caused increase in pupil achievement may be expected to exceed 35 per cent"; (3) these gains

were not secured "at the expense of more important or less definable educational values."

Significant as these results are the attempt in the introductory chapter to appraise earlier experimentation with silent films adds little to our present knowledge. The data are not easily appraised, and to do so in such a summary fashion is to give the chapter the appearance of an *obiter dictum*. A critical appraisal of what general-science teaching calls for in terms of what has already been attempted *without* this new instrumentality would have provided a more useful and a more pertinent background for an appreciation of the results secured. DANIEL C. KNOWLTON.

We give below also a partial reprint of a review of the same volume by Dr. Joseph J. Weber, which appeared in the January issue of The Elementary School Journal.

The experiment is one of the latest contributions to the study of visual aids in education, and as such it is a masterpiece of careful scientific research. The Introduction, which digests briefly previous research in this field in both America and England, evaluates three possible functions of the motion picture in education —informatory, stimulative, and clarifying—and then leads one to feel that the clarifying function is probably the most important. That function is, incidentally, the function which constitutes the chief problem of the experiment.

The total number of pupils was 2,980. The tools of instruction consisted mainly of eight sound films, some selected and some especially produced for this experiment, and a specially prepared textbook of eight chapters, three in physiography and five in biology. The results, obtained by means of two-choice pictorial and three-choice verbal tests, were as follows: mean score of the zero group, 36.8; mean score of the control group, 80.9; mean score of the film group, 90.0. The results gave the sound film a superiority of 20.5 per cent. In the retention test, given three months later, the superiority was even greater, namely, 38.5 per cent.

In a critical review like this, one might touch on what appears to be slights and omissions. For instance, in the enumeration of possible causes for the pronounced differences between the results on the physiography test and those on the biology test, no mention is made of the human proclivity for locational memories; neither is any mention made of the plurality of non-visual relationships in biology as contrasted with physiography.

The study also seems to lack in originality, perhaps because the main results are largely confirmatory and because no attempt was made to analyze individual variations from the massed data. That omission is heavily offset, however, by the meticulous care with which the experiment was conducted. The investigators certainly performed the task which they had set themselves.

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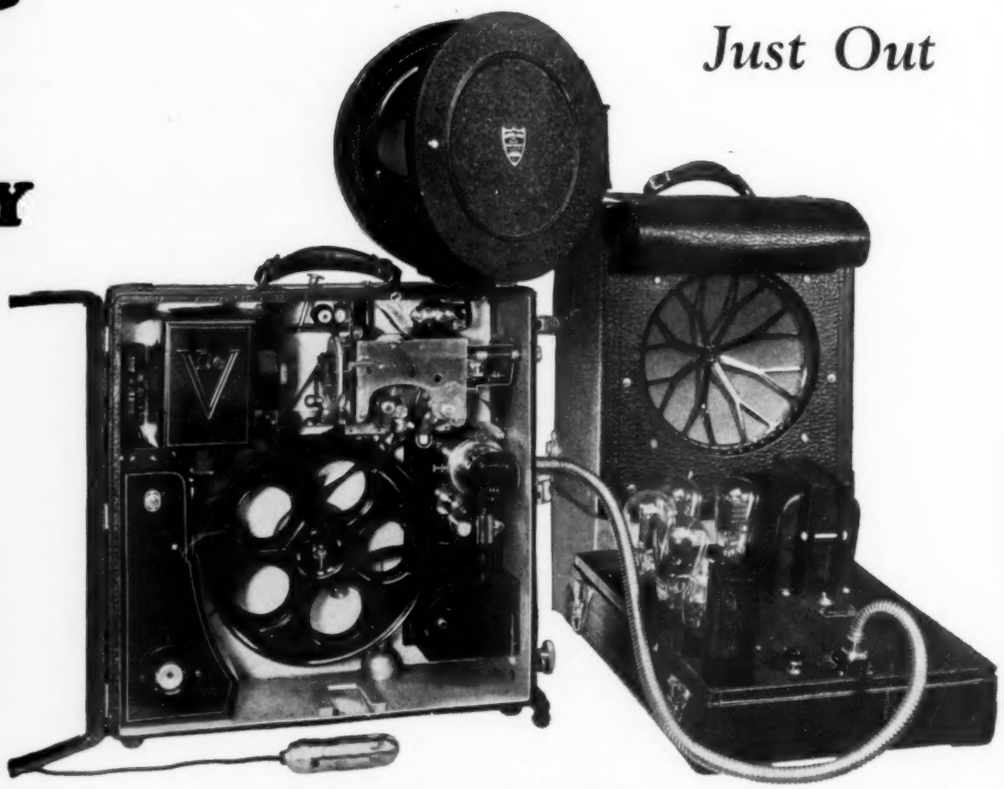

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A Lantern Slide Lesson

(As prepared by Mrs. Bashowitz for the Board of Education, New York City. Slides used are mainly from the State Department. Catalog numbers are given.)

Cotton (5 A Geography)

(*Introduction*) In 4 A you learned about the necessities of life. Name them. Which do you think is most important? From what is clothing made?

(*Aim*) Today we are going to learn about Cotton.

Presentation	*Blackboard Outline*
Map Slide (DC 8) In what group of states is cotton grown widely? (Tell about the surface of this group of states.) What else do you know about the land? What makes it fertile?	1. Southern States A. Surface Lowlands Plain Moist and fertile
Map Slide (D 2) About how much rainfall do we need for cotton? (40") What is the climate of this group of states? What brings rainfall to this section?	B. Climate Cool-warm winters Hot summers Plenty of rainfall from Gulf
Now that we know what climate and what kind of land are needed for the growing of cotton, let us find out how it is planted, raised, and finally made into clothing.	C. Cotton Industry in South
The ground is plowed and a good seed bed is made. This is during March or April. Seeds are sown 3 or 4 feet apart by a machine and covered with a planter. How do you think this work was done years ago? Which is the better way? Why?	a. When planted March or April Ground is plowed b. How planted 3 or 4 feet apart by a machine
Slide (DNO X 95) During what season was this picture taken? How do you know? Describe the cotton plant. Later we find blossoms on this plant before the cotton boll develops.	c. How harvested? By hand Cotton picking
Slide (DNO X 64) Compare size of plantation with previous slide.	
Slide (TD CO 3) What season of the year? Why? Who does the picking of cotton usually? Why? Show cotton boll to class.	
Slide (Keystone 117) Who else is working besides the negroes?	
Slide (DS Y 1) What is this man doing? Touch the cottonbolls. What do you find inside? Try to pick it out. What happened? For many years negroes picked these seeds by hand until ——	d. Ginning Separate seed from cotton
Slide (TD Y W D) Eli Whitney invented a machine called ———.	Cotton Gin— Eli Whitney 1792. Result?
Slide (TD CO 57) Cotton gin to separate the seed from cotton. What effect do you think this invention had upon the cotton crop? Why?	
Slide (Ds Y 2 and Du NY 4) What are wagons waiting for?	
Slide (Dv NY 46) After the cotton is separated from the seed it is put into what? Describe a bale.	e. Bales 500 lbs. each
Slide (Dy Y SY 119 Ds Y 3) How are bales shipped?	f. Shipping of cotton Train, boat, truck
Slide (US TS 54) Cotton Mill. What do you see here?	

Questions for Organization

1. The enemy of the cotton plant is the —— ——.
2. Two things made of cotton are —— and ——.
3. The machine that separates the cotton from the seed is called a ——— ———.
4. Cotton is packed into ———.
5. Cotton is mostly picked by hand.
6. The cotton gin was invented by ——— ———.
7. To kill the weevil the plant is sprayed with ——.
8. From the cotton seed we get —— —— ——.

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Introduction to Film

Do you think you can tell the story of the cotton plant? There are a few things which we still have not learned from our slides and which our picture will show us.

How many have heard of the "boll weevil"? What is it? How do the farmers kill the weevil? About how many pounds in a bale?

Name some things made of cotton. Watch the film for the answers to these questions. At the end you will have a test of eight questions. One word answers.

(Show film)

Test Questions on Film

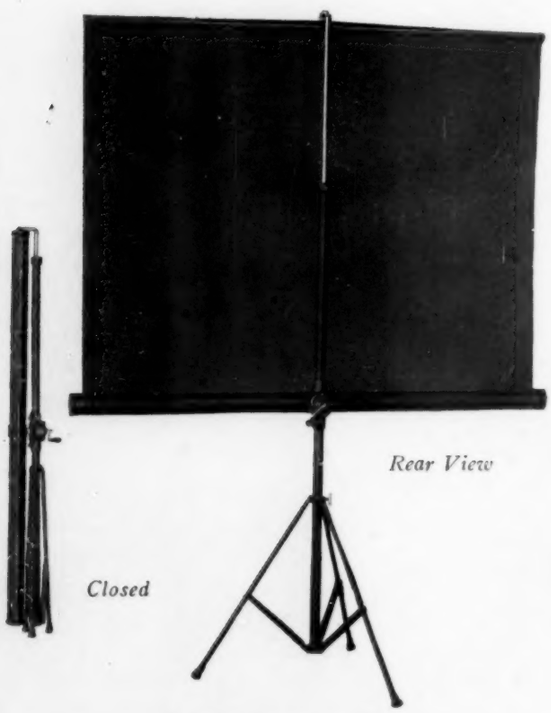
1. Who lives on a plantation?
2. What is a plantation?
3. Tell how cotton seeds are planted.
4. What is the boll weevil?
5. How is cotton harvested?
6. What is done to it after it is picked?
7. Where and how is it shipped to gin? To mills?
8. What are some of the things made from cotton?

Topics for Discussion After Film Showing

A. Life on a Plantation mostly negroes — Why? Wooden houses, etc.
B. Planting and care-taking of cotton plant. Plowing, seed bed, March or April. Seeds 3 or 4 ft. apart. (Compare hand and machine labor. Which is better? Why?) Chopping or Thinning. Poison to kill weevil.
C. Harvesting. Cotton boll develops. Picked by hand. Cotton Gin, its work. Baling, 500 lb. each.
D. Shipping of Cotton. Auto or tractor to warehouse, by truck to dock. Sometimes by train. Put on ships by crane.
E. Making Cloth. Mills or factories—usually located where? Why?
F. Uses of Cotton. Blankets, clothing. Seeds give oil.

Applications—1 class Problem: What effect did the invention of the cotton gin have on the growing of cotton? Why?

Other classes: Use same questions as in organization for written work.



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Two More Erpi-Chicago Films

THE latest additions to the list of educational films, in course of production by Erpi for the University of Chicago Physical Science Series, are the two single reels on "Sound Waves and Their Sources" and "Fundamentals of Acoustics." They are skillfully planned as a two-reel unit-subject, but may be used separately, if desired, each presenting a complete topic in itself.

The presentation opens logically with the original production of sound waves by a tuning-fork, making clear just why a vibrating body gives rise to such waves and what these waves actually are. There follows the vibration of the string of a musical instrument and the various forms of these vibrations—slowed up for study purposes by high-speed photography—and finally the action of the vocal chords which give the human race its voice. The visible portrayal of wave lengths by wave patterns account for the wide variation in sounds, such as the characteristic tones of different instruments or the different vowel sounds uttered by the same voice. The all-important part played by harmonics and overtones in determining the specific character and quality of sounds, whether produced by voice or instrument, is made vividly clear. The exact difference between frequency and intensity becomes visible.

We then follow these sound waves, once produced, to their impact upon surfaces or mechanisms for their reception, registration or interpretation. The phenomenon of echo is beautifully explained, in the open air and in the closed room with four walls and ceiling. The architect's problem of echo and its solution are shown. What the sound waves actually do in the human ear, "how we hear," is made not only clear but unforgettable.

It will be a rare spectator, young or old, educated or uneducated, who does not find his knowledge of "sound and acoustics" vastly clarified and crystallized by these fine educational productions. Those who knew nothing at the start will find themselves with a definite, well-rounded understanding of the phenomena here presented—and in less than a half-hour's time.

Not only for content and technical excellence are these films notable. They emphasize the enormous value of "animation" in presenting invisible or theoretical subject-matter. (The small proportion of actual scenes photographed adds little but variety to the whole). They show too an unmistakable advantage of the "talkie", whereby, for a highly technical subject, an authority may supply an expert explanation beyond the capacity of the average teacher.

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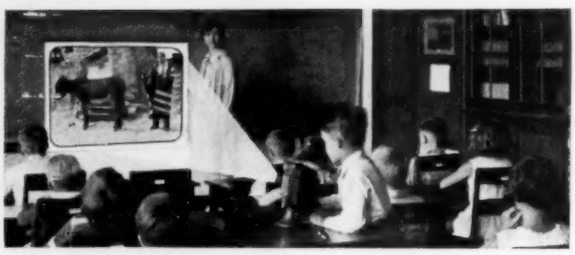

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Confessions of a Visual Enthusiast

(Continued from page 39)

the slide was projected on the screen. It was a very poor slide, however, and could hardly be seen. The room was brilliantly lighted by two ceiling lights and four futuristic wall brackets. Someone suggested turning off the house lights. One of the audience got up and pushed the switch and the ceiling lights went out—but the wall brackets remained lighted and there seemed to be no way of turning them off. The clever photographer soon found a way to do this, however, and the room was in total darkness.

The teacher with the arithmetic slides had, for some reason, switched off the lantern during the slight flurry of turning out the house lights, and was unable to find the switch in the dark. The house lights were turned on again—the lantern was turned on again, and again the arithmetic slide appeared on the screen—somewhat better now in the darkened room.

The audience had returned to their seats and the teacher began talking about the arithmetic. She had about ten slides. They were all poor. They were made on plain glass with very blobby writing in ordinary ink. The writer was unable to follow the explanation, and now remembers having wondered at the time, how first graders could follow it. The English slides were better, but the technique was inferior to blackboard work and there were a number of mistakes in English in the text. Otherwise it was a good demonstration.

The time was getting on a bit by now—in fact the arithmetic demonstration began about the time it should have ended. Unfortunately the photographer was unable to set up for his affair until the arithmetic teacher was finished, because he needed a demonstration table in front of the audience, and the table was under the projector.

The house lights were turned on and the pile of furniture was dis-assembled and piled up again in rather different form at the other end of the room. The purpose of the demonstration was to show the audience how to make photographic lantern slides, but it had evidently not occurred to the photographer that the teachers knew absolutely nothing about photography. He therefore began in about the middle of what he should have said and carried on his remarks in a spasmodic undertone, which was probably very good stuff if anyone could have heard it. Of course he was pressed for time—and then he was such an admirable fellow in other respects that nobody minded.

He gave a very practical demonstration of the actual process of printing a negative on sensitized glass and developing it. The pile of furniture was

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so high that nobody could quite see what he was doing—but one could imagine it—and that was all that was really necessary. The printing of the negative depended largely on correct timing of the exposure. The photographer had evidently forgotten to bring along a watch for this purpose, but was able to borrow one from one of the teachers.

He said the scientific way to get the right exposure was to take the actual negative in question and make a series of exposures varying by three seconds each. This was done by covering part of the negative with black paper and moving to a new position every three seconds. The resulting print was then examined to see which strip of exposure was best suited to that particular negative. He had no black paper, but thought white paper might answer. This experiment consumed some time and we were quite relieved when he was actually ready to select the proper exposure strip and make a final print of the negative.

The test print was developed and the photographer pointed out on it the strip which indicated the best exposure. It was quite impossible for the audience to distinguish the difference between these strips from where they sat, and one or two in the front row got up and gathered about the demonstration table for a closer view. Where the print had before looked like a square of black glass from the audience, it could now not be seen at all, as the view was entirely cut off by the teachers standing around the table. It was nice that these teachers had such a good chance, not only to see the test print, but to hear what the photographer was saying, although the latter advantage may have been somewhat neutralized by the loud conversation of the seated portion of the audience.

At any rate, the critical moment had now arrived when the final print of the negative was to be made, and projected on the screen as a finished lantern slide. The light was switched off in order to get the negative and sensitized slide into a printing frame. There was a tinkle of glass and a muffled exclamation from the photographer, as the negative slipped to the floor and broke into a number of small pieces. This was unfortunate as there was no time to repeat the scientific exposure method with a new negative. We felt sorry for the photographer, for he had proved such a good sport throughout—and even now, in the face of disaster he smilingly declared that he could make just as

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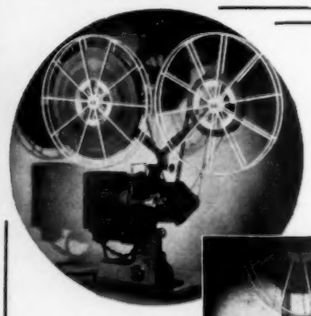

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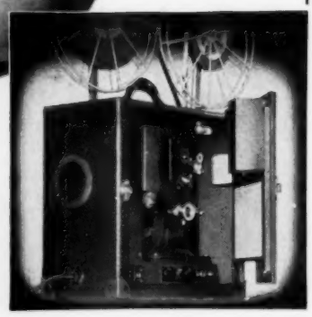

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good a print anyway by guessing at the exposure. He guessed wrong, and the resulting print left much to be desired when it was projected on the screen. One could make out fairly well what the picture was supposed to be, though it was projected sideways because he had printed it the wrong way of the glass. There was no time to dry the plate off and it was amusing to see the drops of water, slowly trickling upward along the screen—amusing, and sad too, for one could not help but see, in those moving drops, the hypo (critical) tears of the guardian angel who watches over chairmen, assistants and photographers.

The demonstration was at an end. In view of the rather inferior result attained in the completed lantern slide, the writer was wholly unprepared for a thunderous burst of applause from the audience, nor was there any. When the assistant turned on the house lights, the room was empty. The teachers had taken advantage of the darkness and the lateness of the hour.

New York University Plans Film Course

A unique course, entitled "The Motion Picture: Its Artistic, Educational and Social Aspects," has been announced by New York University for the academic year of 1934-35. It is to be given under the direction of Dr. Frederic M. Thrasher, Associate Professor of Education, and will cover every phase of the motion picture including the entertainment film as well as the educational and creative production.

This course is the outgrowth of the conviction, based on research, that the motion picture is one of the most tremendous educational and social forces of modern times. The tentative plan states that "the various movements now developing in the field of the artistic and creative film of the non-entertainment type as well as the enormous influence of the popular motion picture have forced the public schools and the colleges and universities to recognize the permanence of this great educational instrument and its potentialities in all educational fields. Education can no longer neglect the motion picture. It must be studied."

Complete presentation of the technical, educational and social aspects of the motion picture,—of both the entertainment and non-entertainment types,—will be illustrated by film showings. The class will visit a New York studio and see pictures in actual process of production; they will investigate the problems of the exhibitor at first hand; they will act as a review committee in pre-viewing a picture under the auspices of the National Board of Review; and they will study such questions as: How may motion picture appreciation be advanced by the public schools? What is the place of the motion picture in public school programs and in the more informal types of education? How may a program of visual education, utilizing the full contribution of the motion picture, be developed?

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Estimates are given for 3 groups
A—Intelligent Adult
Y—Youth (15-20 years)
C—Child (under 15 years)
Bold face type means "recommended"

Advice to the Lovelorn (Lee Tracy, Sally Blane) (U. A.) Fast, wildly exaggerated newspaper comedy with wisecracks and dynamics in best Tracy manner. High pressure reporter is given "Lonelyhearts" column as punishment. His sensational copy starts melodrama with publisher, racketeers, and his adored fiancee. Risque element very slight.
A—Good of kind Y—**Amusing** C—Doubtful

All of Me (Fredric March, Miriam Hopkins) (Paramount) Opens with elaborate seduction in orchard. Then hero and heroine argue endlessly over marriage, he for, she against because "marriage kills love." Then heroine supposedly learns better from dreary affair of a jailbird and his sweetie—hence moral ending.
A—Poor Y—Very bad C—No

As Husbands Go (Warner Baxter) (Fox) Lucile (wife) and Emmie (widow) find romance in Paris. Lucile plans to divorce devoted husband, but back in Dubuque her nerve fails. Paris rival comes, understands and goes back alone. Emmie and Hippy furnish the comedy such as it is.
A—Fair Y—Perhaps C—No interest

Bedside (Warren William, Jane Muir) (First Nat'l) Gambling medical student loses young nurse's money but starts out with fake diploma as partner of bona fide doctor. Huge success through "irresistible" bedside manner, until exposed. "Redeemed" by nurse, he starts over from the bottom. Often absurd and unconvincing.
A—Mediocre Y—Poor C—No

Charming Deceiver, The (Constance Cummings) (Majestic) Feeble comedy made in England about clever young Englishman who poses as various people. But heroine counters with dual role as manikin and movie star. Complications, some funny, some inane. Dialog thoroughly uninspired.
A—Mediocre Y—Hardly C—No

College Coach (Pat O'Brien, Ann Dvorak) (Warner) Lively story of college football as brazen "racket" aimed merely at box-office, profits, dominating college policies, making a farce of scholarship, with "toughs" hired to win games. Falsity, exaggeration, unpleasant characters defeat the supposed satire.
A—Unpleasant Y—Better not C—No

Day of Reckoning (Richard Dix, Madge Evans) (MGM) Dismal attempt, poorly written and acted, at triangle melodrama. Happy home, extravagant wife, embezzling husband, jail, rich villain, unfaithful wife shot by villain's mistress, hero foams and kills villain, etc. Stupid dialog and direction. Una Merkel as loyal maid only bright spot.
A—Worthless Y—Unwholesome C—No

East of Fifth Avenue (Wallace Ford) (Columbia) Elementary portrayal of supposed "life" in East Side boarding-house, with depressingly futile people who eke out existence by lying, cheating, stealing, gambling. Hero is racetrack tout, gets heroine with child, marries contemptible blonde who skips with winnings.
A—Trash Y—Unwholesome C—No

Emil und die Detektive (Foreign cast) (German Production) Country boy visits grandmother in Berlin, is robbed by sinister stranger on train. Trailing and capture by hero and city kid pals make cumulative thrill. Masterpiece of child-acting and true cinematic art. Hollywood should study it for difference between megaphone-obedience and acting.
A—**Exceptionally fine** Y—Probably good C—Probably good

Fugitive Lovers (Madge Evans, Robert Montgomery) (MGM) Hero and heroine meet on cross-country bus, he fleeing Sing Sing, she the crude pest of her chorus-girl life (and of the audience). Rescue of snowbound school-children solves all. Fast tempo, excitement, suspense, but depressing picture of bus travel and much bad taste in comedy.
A—Fair thriller Y—Exciting C—Doubtful

Fury of the Jungle (Donald Cook, Peggy Shannon) (Columbia) Another use of hectic jungle background for a lone white heroine surrounded by degenerate males, which gives free play for cruelty, bestiality, grewsome thrills, and sex at its rawest. Cast and acting too good for such trashy material.
A—Mediocre Y—Unwholesome C—No

Gallant Lady, The (Ann Harding, Otto Kruger, Clive Brook) (U. A.) Airplane tragedy robs fine heroine of her husband-to-be. Her struggles thereafter to carry on for herself and baby are made intensely interesting and appealing by fine acting and very human characters. She wins out. Mature, skillful, delicate, convincing.
A—**Very good** Y—Unsuitable C—No

Hell and High Water (Richard Arlen, Judith Allen) (Paramount) Aims to be realistic portrayal of simple, honest, crude water-front captain of garbage-gathering tugboat. Harmless but boring—artificial story, banal dialog, confused motivation, amateurish acting and clumsy direction. Too unintelligent to be interesting.
A—Mediocre Y—Harmless C—No interest

If I Were Free (Irene Dunne, Clive Brook) (Radio) Mature problem play on the difficulties of true love when marriage is impossible, done with charm and dignity, acting and direction notably fine. Convincing in character, rich in intelligent humor. Too smooth, deft, and subtle for general popularity.
A—**Very good** Y—Mature C—Beyond them

Jimmy and Sally (James Dunn, Claire Trevor) (Fox) Feeble mixture of farce, comedy and melodrama. Hero is noisy, smart-aleck publicity man whose brazen manner and sensational methods bring disaster. Worthy heroine finally pounds some sense into him and he redeems himself in time to win her back from rival suitor.
A—Mediocre Y—Passable C—No interest

King for a Night (Chester Morris, Helen Twelvetrees) (Universal) Tough, lawless, painfully conceited son of feeble minister rises to prize-fight glory. His sister becomes mistress to fight-manager to "help brother," but finally has to shoot manager and brother goes heroically to electric chair to top off the cheap, depressing stuff.
A—Crude Y—By no means C—No

Let's Fall in Love (Edmund Lowe) (Columbia) Artificial story of Hollywood high pressure director who trains little circus girl to be emergency "Swedish star". Success until exposed by his fiancee. Heartbroken little "star" learns he loves her after all. Painful singing, but mostly human and appealing.
A—Fair Y—Probably good C—Harmless

Love, Honor and Oh, Baby (Zasu Pitts, Slim Summerville) (Universal) Labored effort at another semi-slapstick comedy by this team, less successful than previous ones. Zasu as maid tries to frame her employer to give her blundering lawyer-fiancee a profitable breach-of-promise case to finance their marriage. Feeble stuff.
A—Futile Y—No C—No

Madame Spy (Fay Wray, Nils Asther) (Universal) Another complex war-spy story made by formula, with regulation ingredients of secret codes, dark corners, stealthy steps, and whole atmosphere very thick with intrigue and peril. Russian spy, married to German officer, is stalked by tragedy but achieves usual happy ending.
A—Hardly Y—Good of kind C—Exciting

Man of Two Worlds (Francis Lederer, Elissa Landi) (RKO) Highly artificial concoction, bringing primitive but alert Eskimo from north Greenland to London. His struggles to acquire language and ways of civilization give many interesting moments, through Lederer's expert acting, relieving greatly general monotony of subject.
A—Fair Y—Fair C—Fair

Master of Men (Jack Holt, Fay Wray) (Columbia) Threadbare plot about steel industry and stock market. Hero is labor-champion who rises to executive position and becomes money-mad. Financial disaster brings about expected results. Chiefly sensational stuff in the usual Holt manner.
A—Mediocre Y—Doubtful C—No interest

Miss Fane's Baby Is Stolen (Dorothea Wieck) (Paramount) Elementary attempt at sensational expose of kidnaping. Star's mother-role made to portray merely maudlin affection and absurd treatment of her baby. Then, crude melodrama of stealing, near killing and burial, and crazy rescue of child. Incredibly stupid use of this brilliant actress.
A—Discouraging Y—Better not C—By no means

Nana (Anna Sten, Richard Bennet, Lionel Atwill) (U. A.) Notable screening of Zola's novel of career of beautiful wanton, from gutter to social and artistic heights in Paris seventy years ago, and finally back to suicide. Splendidly set, acted, directed and photographed. Marks Sten as outstanding screen actress.
A—**Excellent** Y—By no means C—No

Queen Christina (Greta Garbo, John Gilbert) (MGM) Splendidly produced, regal throughout, with fine supporting cast, this nearly historical picture of 17th century Sweden gives Garbo her finest role to date as the lonely, iron-willed, human queen. Elaborate love episode, sensational and strong, not for youth.
A—**Excellent** Y—Decidedly not C—No

Sons of the Desert (Laurel and Hardy) (MGM) Laurel and Hardy nonsense-and-slapstick comedy at its best, with laughs for everybody, and decidedly more character and plot interest than is usually found in such farce-comedy. Laurel's doddering pantomime is more skillful than ever. Amusing for any audience.
A—Good of kind Y—**Very good** C—**Very good**

This Side of Heaven (Lionel Barrymore, Fay Bainter) (MGM) Thoroughly wholesome, realistic, sentimental story of happy family and comical maid, suddenly disrupted by crooked embezzlement charge against father. The critical situation brings out the best in all concerned and the human little picture earns its happy ending convincingly.
A—**Pleasant** Y—**Entertaining** C—**Good**

Waltz Time (Evelyn Laye and English cast) (British-Gaumont-Fox) Costly, lumbering musical comedy that tries hard to be fast and funny. Irrestible hero goes merry-making with wife's maid and others, until wife dons mask and accent to catch him at a ball. Faulty sound spoils the singing, dialog dull, action ponderous, comedy feeble.
A—Weak Y—Better not C—No

Women in His Life, The (Otto Kruger) (MGM) Hero is super criminal-lawyer who is successful with juries and women. Involved plot centers around trial of innocent man and hero's efforts to save him. Kruger wasted in an artificial role and an unconvincing story. Overdone melodrama at finish.
A—Mediocre Y—Unwholesome C—No

Worst Woman in Paris (Benita Hume, Adolphe Menjou) (Fox) Blase heroine leaves wealthy Parisian playboy for America. Train wreck brings genuine romance with Kansas teacher, binding him to devoted secretary. Playboy's financial reverses recalls her, leaving hero to marry whom he should. Inoffensively sophisticated, often unconvincing.
A—Fair Y—Better not C—No

AMONG THE PRODUCERS

Where the commercial firms — whose activities have an important bearing on progress in the visual field — are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necessary space limitations, such material as seems to have most informational and news value to our readers.

Summary of Erpi Activities

DEVELOPMENTS of the past year carried forward by Erpi Picture Consultants, Inc., under the leadership of Colonel F. L. Devereux, Vice-President, are of interest to all educators using aural and visual aids in teaching.

The year was an outstanding one from the standpoint of the completion of important experiments proving the effectiveness of talking pictures in education. Perhaps the most comprehensive of these experiments was that conducted by Dr. V. C. Arnspiger, the results of which were published by the Bureau of Publications, Teachers College, Columbia University, under the title, *Measuring the Effectiveness of Talking Pictures as Teaching Aids.*

The experiment conducted by Dr. A. J. Stoddard, Superintendent of Schools, Providence, Rhode Island, to measure the effectiveness of the talking picture in teaching large groups was completed during the year with the cooperation of Colonel Devereux' organization, and while the results will not be published until 1934, a preliminary report shows that large groups of two hundred students or more can be taught as effectively with talking pictures as can small groups of forty without the aid of talking pictures. The significance of this result can be apparent to all educators who are interested in economical school administration.

Another experiment conducted at Teachers College, Columbia University, by Mr. Leon H. Westfall, demonstrated the value of various methods of presenting the film lesson in the classroom. This study will be published in 1934, and will be of considerable value to classroom teachers.

The distribution of available talking motion picture material received new impetus through arrangements made with Victor Animatograph and Bell & Howell to distribute the fifty curriculum subjects produced by Erpi, through these two organizations in the sound-on-film 16 mm. size. This move makes available all of these pictures to all of the schools having the Victor, Bell & Howell, or Western Electric sound reproducers, which undoubtedly will extend the range of use of these subjects.

Several new teaching films were produced during the year by Erpi Picture Consultants, Inc., in co-operation with the University of Chicago for use in the Physical Sciences. The two most recent subjects, *Sound Waves and Their Sources,* and *The Fundamentals of Acoustics,* are reviewed in this issue.

That the talking picture is becoming of increasing interest to educators internationally, is evidenced by the translation of one of its films into Turkish by Erpi Picture Consultants, Inc., for use in the new educational system of the Turkish government. This subject is now being given a preliminary trial in Turkey, and it is expected that a large number of American subjects will be produced for use there. A trial of one of its films in the Social Sciences, *Transportation,* in the French language, is also being made. The initial results seem to indicate that foreign language teaching in the American schools can be materially helped through the offering of good American films in French, German, Spanish and Italian.

The year 1933 also was marked by the production of several new talking picture courses of study by this organization, the most prominent of which is a course known as "Modern Trends in Education," utilizing fourteen subjects for use in teacher training with the necessary text, teacher guides, and other supplemental material. This is the course of instruction used so successfully at Boston University.

A second course of study in the Biological Sciences, prepared by Dr. Melvin Brodshaug and James A. Brill, utilizes a large number of Natural Science subjects. This course comprises 18 units, and includes all the necessary instructional materials needed for a course of instruction in the Biological Sciences. A comprehensive study of the use of films in the primary grades was completed during the year by Dr. Laura Krieger Eads, also of the Erpi staff, and is now being offered at these levels. Preliminary results indicate that the films can be effectively used at the lower grades, provided specially prepared texts and teacher manuals are furnished with the films.

During the year the book by Colonel Devereux, with a foreword by President Robert M. Hutchins of the University of Chicago, entitled, *The Educational Talking Picture* was published by the Univeristy of Chicago Press. This book is a complete and comprehensive treatment of the whole subject of teaching by means of the talking picture, including descriptions of the fundamental research and production work involved, utilization in the curriculum, general uses in adult education and at the college level, equipment required, and other interesting phases of the subject.

Two Great Americans—

—live again in the classroom

TO THOUSANDS of pupils February will mark more than the birth of Washington and Lincoln . . . it will mark the birth of a greater inspiration . . . a new concept of these two great Presidents. For in classrooms from coast to coast Eastman's thrilling historical motion pictures, *George Washington* and *Abraham Lincoln*, will be shown.

Lincoln and Washington will *live* again in those classrooms . . . The vivid moments which have become history will be re-created: Washington's courageous fight to build the Nation . . . Lincoln's struggle to save it. No mere stories, these, but mighty pageants, realistically throbbing with life.

new low prices!

These great pictures have been prepared especially for classroom use. Painstaking research assures their authenticity. Yet, they are but two out of more than two hundred motion pictures available to schools equipped to use the powerful and modern teaching aid—Eastman Classroom Films.

If your pupils are not receiving the benefit of these films, investigate them now. Prices have recently been reduced by an average of more than 30%. Eastman Teaching Films, Inc. (Subsidiary of Eastman Kodak Company), Rochester, New York.

George Washington, His Life and Times comprises four reels: Conquering the Wilderness; Uniting the Colonies; Winning Independence; Building the Nation. Price complete (16-millimeter), including transportation, $96. Wire your order.

Abraham Lincoln is a two-reel picture. Projection time, about 30 minutes. Reel I, The Pioneer; reel II, The Statesman. Price complete (16-millimeter), including transportation, $48. To insure prompt delivery, wire your order immediately.

Eastman CLASSROOM FILMS

The 16mm. Sound Film Company

As its name indicates, this new company proposes to specialize in 16 mm. sound-on-film production and distribution. In addition to the films announced in the advertising pages of this issue, their plans for 1934 include eight or ten feature films chosen from *Zwei Herzen im 3/4 Takt, Emil und die Detektive, Der Kongress Tanzt,* and *Maedchen in Uniform,* in German; *Les Trois Mousquetaires, A Nous la Liberte,* and *Poil de Carotte,* in French; *La Cancion del Dia,* and *Bajo la Sombra de Pancho Villa,* in Spanish; *Potemkin,* and *Soviets on Parade,* from Russia; and American talking films, such as *Abraham Lincoln, The Taming of the Shrew, Oliver Twist, Simba, This Is America.*

In addition to the travel subjects already available, films on Spain, France, England and other countries of cultural significance will be added to the *Travel Adventure Series.*

Teaching handbooks to supplement the use of these films will be prepared in all subjects and every effort to heighten the technique of visual education will be made.

The pedagogical policies and work of the company will be guided by an Advisory Board of distinguished educators, both American and European, headed by Professor Lawrence A. Wilkins of Columbia, who is also Director of Modern Languages in the New York City High Schools.

16 mm. Talking Pictures Released by Victor

The announcement of Victor Animatograph corporation that the well known ERPI Educational Films, including those made at the University of Chicago, are being released in 16 mm. Sound-on-Film will undoubtedly prove of tremendous interest to visual-minded educators for the reason that the availability of 16 mm. sound films such as these will have a decided influence on the rapidity with which the transition from silent to sound projection will be effected in the educational field.

The production of the 16 mm. sound-on-film prints of these films is being handled by the recently established Film Division of the Victor Animatograph Corporation at 242 West 55th Street, New York City. Prints will be offered for outright purchase by Victor and it is understood that a number of sources such as Visual Instruction Departments of State Universities will offer rental service.

These films have figured largely in national publicity in recent months by virtue of having been tested, with highly gratifying results, in connection with a number of important visual education experiments. Also, thousands of visitors at the Century of Progress Exposition in Chicago witnessed demonstrations of the University of Chicago Films at the Model Classroom in the Hall of Social Science. The pictures have grown out of actual teaching situations and are precisely integrated with units of instruction of which they are a part.

They are the result of years of creative research on the part of curriculum specialists, educational methods experts, subject matter specialists, and sound film technicians. Important experiments and tests made with them have resulted in their wide recognition.

The series now available embraces such subjects as: music, physics, vocational guidance, mathematics, elementary school science, and training films for parents and teachers.

First public showings of the 16 mm. Sound-on-Film prints will be made with the Victor Sound-on-Film Animatophone at the National Education Association Convention, Cleveland, Ohio, February 26-March 1.

Historical Lantern Slide Units

Photographic History Service of Hollywood announces the paralleling of their *Photographic Historical Study Units* with *Lantern Slide Units.* No. 4 of the *Roman Life* unit is illustrated, shown here inverted as it goes into the stereopticon.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
ROMAN LIFE
HISTORICAL SLIDE STUDY UNIT ©
Use Teachers' Guide - Show In Sequence
PHOTOGRAPHIC HISTORY SERVICE
Hollywood, Cal.

This combination offers an ideal arrangement as the photographs can be used for preliminary examination and study by the student, followed by the slides for large-group discussion of the topic.

The photographic units heretofore offered were selected and prepared as visual aids from historical motion picture "stills" and are well known to our readers as they have been previously illustrated and described in our columns.

In preparing the slide units the introduction, text and question guide and other pertinent data have been incorporated in a Teacher's Guide booklet which is packed in the box with the study unit of slides. In this box the slides are indexed in such a manner that their arrangement in proper sequence can be determined at a glance. The box also gives ample protection to the slides both during transportation and handling in the classroom.

Great care has been employed in retouching the negatives in order that the points offering the highest

teaching value may be emphasized and, with the least possible effort, the particular message of each picture may be presented in such a vivid, related continuity that the subject as a whole is brought into proper balance.

All six periods, *Roman Life, Feudal Life, The Pilgrims, American Revolution and Organization of Government, Westward Movement* and *Slave Life and Abraham Lincoln,* are now available in both forms.

A new catalogue illustrating or describing each picture in each of the six units is just off the press. It will be sent to you on request. Address Photographic History Service, 5537 Hollywood Blvd., Hollywood, California, or, if east of the Mississippi, write the eastern sales manager, Mr. Lee Whitcomb, Leonia, New Jersey.

Educators Adopt "Talkies"

Investigations conducted at various Universities have all made favorable reports on results in the school room. They commend especially those educational films where the sound is a vital and realistic part of the action—and not merely the voice of a lecturer.

Herman A. DeVry, Inc., has not only anticipated, but has stimulated this demand, by constructing two sound units especially fitted for school use. These are the DeVry 35 mm. Sound-on-Film Unit, and the DeVry 16 mm. Sound-on-Film Unit, designed for audiences up to 2500 and 1500 respectively.

The welcome accorded these two superb examples of motion picture engineering by the great high schools and universities of the land; and, by the major industrial companies like Ford (78 units), and Firestone (60 units), is more eloquent of their high quality than volumes of advertising.

The twenty years of motion picture engineering enjoyed by DeVry, justifies their motto, "You Are Safe When You Buy DeVry."

Offer to Silent Equipment Owners

Sunny Schick, national broker of cinemachinery and photographic equipment, announces that he is in a position to make liberal trades and exchanges with schools, churches and other non-theatrical organizations, who desire the latest type of 16 mm. or 35 mm. talking picture equipment. Many persons and organizations who have bought silent equipment during the last three years, can have their equipment converted into the latest type of either 16 mm. or 35 mm. sound-on-film equipment with sound-on-film devices as an accessory to the regular projector. Or, if they prefer to exchange their silent projectors for the latest type of sound equipment, Mr. Schick will make large allowances on high class silent equipment that has been purchased within the last three years. Mr. Schick also offers to place portable machines into schools and institutions on the payment plan.

A Better Position

You Can Get It

Hundreds of teachers, students and college graduates will earn two hundred dollars or more this summer. SO CAN YOU. Hundreds of others will secure a better position and a larger salary for next year. YOU CAN BE ONE OF THEM. Complete information and helpful suggestions will be mailed on receipt of a three cent stamp. Good positions are available now in every state. They will soon be filled.

Continental Teachers Agency, Inc.

(Teachers address Dept. T. All others address Dept. S.)

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Covers the ENTIRE United States

School Officials! You may wire us your vacancies at our expense, if speed is urgent. You will receive complete, free confidential reports by air mail within 36 hours.

Syncrofilm
SOUND EQUIPMENT

PORTABLE
35 mm. Sound-on-Film Projector
For School Room, Auditoriums, Churches, Institutions, Camps and Industrial Organizations

Brings the theatre into your own auditorium. This projector while being portable gives results equal to professional theatre equipment.

The mechanism is a masterpiece of precision and accuracy which is required to reproduce the new recordings with true fidelity.

Its designers have had years of experience in the building of film and sound reproducing equipment. Features straight line film travel. Uses either 500, 750, or 1000 Watt Mazda Lamp.

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Export Office: 15 Laight St., N.Y.C.
Cable Address: Romos, New York
Distributors throughout the world.

HERE THEY ARE!

A Trade Directory for the Visual Field

FILMS

Arnco Films, Inc. (5)
1270 Sixth Ave., New York City.

Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City

Carlyle Ellis (1, 4)
53 Hamilton Terrace, New York City
Producer of Social Service Films

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Eastman Teaching Films, Inc. (1, 4)
Rochester, N. Y.
(See advertisement on page 57)

Edited Pictures System, Inc. (1, 4)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 6)
250 W. 57th St., New York City
(See advertisement on page 34)

Garrison Film (3, 4)
729 Seventh Ave., New York City.
(See advertisement on page 50)

Ideal Pictures Corp. (1, 4)
30 E. Eighth St., Chicago, Ill.

Modern Woodmen of America (3, 4)
Rock Island, Ill.

Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.

Ray-Bell Films, Inc. (3, 6)
817 University Ave., St. Paul, Minn.

The 16 mm. Sound Film Co. (5)
11 W. 42nd St., New York City
(See advertisement on page 54)

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Corp. (3)
730 Fifth Ave., New York City
(See advertisement on page 32)

Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y. M .C. A. Motion Picture Bureau (1, 4)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago, Ill.

MOTION PICTURE MACHINES and SUPPLIES

Ampro Projector Co. (4)
2839 N. Western Ave., Chicago
(See advertisement on inside front cover)

Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on inside back cover)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 6)
(Western Electric Sound System)
250 W. 57th St., New York City
(See advertisement on page 34)

Herman A. DeVry, Inc. (3, 6)
1111 Center St., Chicago
(See advertisement on page 48)

Ideal Pictures Corp. (1, 4)
30 E. Eighth St., Chicago, Ill.

International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on page 33)

Motion Picture Accessories Co. (3, 6)
43-47 W. 24th St., New York City

New England Motion Picture Equipment Corp. (3, 6)
356 Worthington St., Springfield, Mass.

Regina Photo Supply Ltd. (3, 6)
1924 Rose St., Regina, Sask.

Sunny Schick (3, 6)
Fort Wayne, Ind.
(See advertisement on page 54)

United Projector and Film Corp. (3, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 30)

Weber Machine Corp. (2)
59 Rutter St., Rochester, N. Y.
(See advertisement on page 59)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PHOTOGRAPHS and PRINTS

Photographic History Service
5537 Hollywood Blvd., Hollywood, Cal.
(See advertisement on page 51)

SCREENS

Da-Lite Screen Co.
2721 N. Crawford Ave., Chicago
(See advertisement on page 50)

Motion Picture Accessories Co.
43-47 W. 24th St., New York City

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

Conrad Slide and Projection Co.
510 Twenty-second Ave., East Superior, Wis.

Eastman Educational Slides
Iowa City, Ia.

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
30 E. Eighth St., Chicago, Ill.

Keystone View Co.
Meadville, Pa.
(See advertisement on page 32)

Radio-Mat Slide Co., Inc.
1674 Broadway, New York City
(See advertisement on page 50)

Scarborite Colors
Scarborough-on-Hudson, N. Y.
(See advertisement on page 51)

Society for Visual Education
327 S. LaSa'le St., Chicago
(See advertisement on page 52)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 29)

Victor Animatograph Corp.
Davenport, Iowa
(See advertisement on page 30)

Williams, Browne and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

Herman A. DeVry, Inc.
1111 Center St., Chicago
(See advertisement on page 48)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 32)

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 53)

E. Leitz, Inc.
60 E. 10th St., New York City

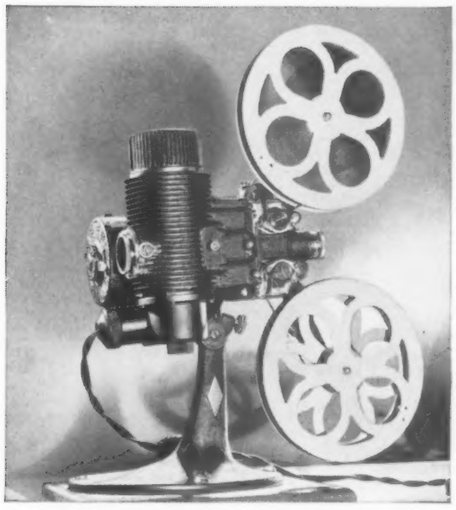
Regina Photo Supply Ltd.
1924 Rose St., Regina, Sask.

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 29)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates firm supplies 35 mm. silent.
(2) indicates firm supplies 35 mm. sound.
(3) indicates firm supplies 35 mm. sound and silent.
(4) indicates firm supplies 16 mm. silent.
(5) indicates firm supplies 16 mm. sound-on-film.
(6) indicates firm supplies 16 mm. sound and silent.



THE Filmo

750 watt "RT"

Projector

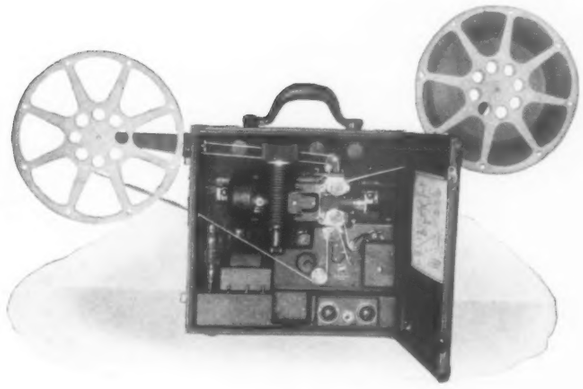
NOW --- WITH DIRECT LINE-CURRENT LAMP

THE new Filmo RT Projector, with 750-watt 110-volt lamp, is a moderately priced machine offering unusual adaptability to various line current conditions and to varying illumination requirements. In the school room especially, where projection must be wholly free from all mechanical considerations, this new Filmo Projector will supply a real need. Where the prevailing line voltage is above or below 110, it permits using a lamp of a corresponding voltage rating. Where the tremendous brilliance of the 750-watt lamp is not needed, Filmo RT permits the economizing use of lower priced, longer lived 300-, 400-, or 500-watt line voltage lamps.

With an improved cooling system which prolongs lamp life and enhances lamp efficiency, and a refined reflector adjustment which gives an absolutely even distribution of light from the lamp's biplane filament, the Model RT becomes the last word, among machines at or near its price, in excellence of 16 mm. projection. A power rewind rewinds a film in less than a minute. A manual framer is provided for out-of-frame pictures. A clutch permits still-picture projection and a reverse switch permits showing a film backward to repeat a scene without rewinding.

Filmo Projectors are priced at from $145 to $310.

BELL & HOWELL Filmosound



The highest standards of sound and picture reproduction are met in the Bell & Howell Filmosound. Synchronization is perfect. Tone "flutter" is positively eliminated. The 15-watt amplifier provides volume for an audience of 2000. Ease and surety of correct operation are assured by foresighted design. Film life is longer, due to fully adequate film protective features. And the serviceability and dependability of the Filmosound have been thoroughly proved. Write for details.

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EVERY REEL

WHEN you show 35-millimeter pictures without a projection booth, the film must be of the safety type. Common caution demands it...underwriters' requirements insist upon it. In ordering pictures, specify that they be printed on Eastman Safety Film. Before projecting, be sure that the identification *Eastman...Safety...Kodak* appears in the margins at regular intervals...from the beginning to the end of every reel. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

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